

Tr—Trachea

tr—Tergal ridge

TYM—Tymbal

Vi—Ventral internal muscles

Vma—Ventral muscle of the tergal apodeme

Vnv—Ventral nerve

wg—Wing of sclerotized V-shaped structure of first abdominal segment

1Ph—First phragma

2Ph—Second phragma

I—First abdominal segment

ISp—First abdominal spiracle

II—Second abdominal segment

1pmxb—Protractor muscle of the maxillary bristle

2pmxb—Protractor muscle of the maxillary bristle

Spiders from Powdermill Nature Reserve

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Abstract: This paper is a list of 150 species of spiders collected during a 2-week study of the fauna of Powdermill Nature Reserve in Pennsylvania.

Local and regional faunal lists are the backbone of ecological and zoogeographical studies. Such lists provide the detailed information on local faunas necessary for syntheses of a broader scope. The spider fauna of Pennsylvania has been sadly neglected. Distribution maps in recent taxonomic revisions almost invariably show a lack of locality records from this state. There has been only one list of Pennsylvania spiders published during the last half century (Truman, 1942): a list of spiders from Presque Isle, Erie County. This present paper is also a local faunal list.

The Powdermill Nature Reserve of Carnegie Museum is an area of about 1,500 acres in the Ligonier Valley of Westmoreland County, Pennsylvania. The reserve includes a variety of woodland and open (chiefly old field) habitats. This collection was primarily made during a 2-week study in June and July, 1965, with a few additional specimens collected at other times of the year. This list must, of necessity, be regarded as preliminary. With the exception of duplicates retained by the author, the specimens are deposited in Carnegie Museum.

The collection consists of over 1,000 specimens of mature spiders, representing about 150 species. The list from Presque Isle also includes about 150 species, but the two lists have only half their species in common. These lists, along with scattered reports, bring the published number of Pennsylvania species between 200 and 250. Judging by the fauna of New York state, there should eventually be more than 500 species of Pennsylvania spiders.

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ORDER ARANEIDA

Suborder MYGALOMORPHAE

ANTRODIAETIDAE

Antrodiaetus unicolor (Hentz)

Suborder ARANEAMORPHAE

AMAUROBIIDAE

Amaurobius bennetti (Blackwall)

DICTYNIDAE

Dictyna cruciata Emerton*Dictyna foliacea* (Hentz)*Dictyna frondea* (Hentz)*Dictyna sublata* (Hentz)*Lathys foxi* Marx

ULOBORIDAE

Hyptiotes sp. (immature)

SEGESTERIIDAE

Ariadna bicolor (Hentz)

TETRAGNATHIDAE

Leucauge venusta (Walckenaer)*Mimognatha foxi* (McCook)*Pachygnatha autumnalis* Keyserling*Tetragnatha elongata* Walckenaer*Tetragnatha straminea* Emerton*Tetragnatha versicolor* Walckenaer

THERIDIIDAE

Achaearana globosum (Hentz)*Achaearana tepidariorum* (Koch)*Ancylorrhaneis hirsutum* (Emerton)*Asagena americana* Emerton*Crustulina altera* Gertsch and Archer*Ctenium frontata* (Banks)*Ctenium pumilis* (Emerton)*Dipoena nigra* (Emerton)*Enoplognatha tecta* (Keyserling)*Euryopsis funebris* (Hentz)*Steatoda borealis* (Hentz)*Teutana triangulosa* (Walckenaer)*Theridion albidum* Banks*Theridion differens* Emerton*Theridion frondeum* Emerton*Theridion lyricum* Walckenaer*Theridion murarium* Emerton*Theridion sexpunctatum* Emerton*Theridion spirale* Emerton*Theridula opulenta* Walckenaer

ERIGONIDAE

Ceraticelus bulbosus (Emerton)*Ceraticelus fissiceps* (Cambridge)*Ceraticelus laetabilis* (Cambridge)*Ceratinopsis formosa* (Banks)*Ceratinopsis interpres* (Cambridge)*Ceratinopsis nigriceps* Emerton*Collinsia oxypaederotipus* (Crosby)*Cornicularia minuatus* Emerton*Cornicularia vigilax* (Blackwall)*Eperigone maculata* (Banks)*Erigone autumnalis* Emerton*Grammonota trivittata* ? Banks*Hypselisthes florens* (Cambridge)*Maso sarcocuum* (Crosby and Bishop)*Maso sundevalli* (Westring)*Origanates rostratus* (Emerton)*Scylaceus pallida* (Emerton)

LINYPHIIDAE

Bathyphantes albiventris (Banks)*Leptyphantes subalpina* (Emerton)*Linyphia waldea* Chamberlin and Ivie*Meioneta fabra* (Keyserling)*Pityohyphantes costatus* Hentz*Tennesseeillum formica* (Emerton)

ARANEIDAE

Araneinae

Acacesia hamata (Hentz)*Acanthepeira stellata* (Walckenaer)

Araneus attestor Petrunkevitch
Araneus cornutus Clerck
Araneus marmoreus Clerck
Araneus solitarius (Emerton)
Araneus trifolium (Hentz)
Araniella displicata (Hentz)
Cyclosa conica (Pallos)
Cyclosa turbinata (Walckenaer)
Eustala anastera (Walckenaer)
Mangora gibberosa (Hentz)
Mastophora bisaccata ? (Emerton) (immature)
Neoscona arabesca (Walckenaer)
Singa praetensis Emerton
Singa sp. aff. *variabilis*

Argiopinae

Argiope trifasciata (Forsk.)
Gea heptagon (Hentz)

Gasteracanthinae

Micrathena gracilis (Walckenaer)
Micrathena sagittata (Walckenaer)

Theridiosomatinae

Theridiosomma radiosum McCook

AGELENIDAE

Agelenopsis pennsylvanica (Koch)
Cicurina arcuata Keyserling
Cicurina brevis (Emerton)
Cicurina idahoana Chamberlin
Cicurina pallida Keyserling
Coras medicinalis (Hentz)
Wadotes sp. (immature)

HAHNIIDAE

Antistea brunnea ? (Emerton) (immature)
Hahnina cinerea Emerton

OXYOPIIDAE

Oxyopes salticus (Hentz)

PISAUROIDAE

Dolomedes scriptus Hentz
Dolomedes tenebrosus Hentz
Dolomedes triton sexpunctatus Hentz
Dolomedes urinator Walckenaer
Dolomedes vittatus Walckenaer
Pisaurina brevipes (Emerton)
Pisaurina mira (Walckenaer)
Pisaurina mira var. *subinflata*

LYCOSIDAE

Arctosa virgo (Chamberlin)
Lycosa frondicola Emerton
Lycosa gulosa Walckenaer
Lycosa helluo Walckenaer
Lycosa rabida Walckenaer
Pardosa distincta (Blackwall)
Pardosa lapidicina Emerton
Pardosa milvina Hentz
Pardosa moesta Banks
Pardosa saxatilis (Hentz)
Pirata insularis Emerton
Pirata maculatus Emerton
Pirata minutus Emerton
Pirata montanus Emerton
Schizocosa avida (Walckenaer)
Schizocosa crassipes (Walckenaer)
Schizocosa saltatrix (Hentz)

GNAPHOSIDAE

Drassyllus fallens Chamberlin
Sosticus insularis (Banks)
Zelotes duplex Chamberlin

ANYPHAENIDAE

Anyphaenella saltabunda (Hentz)

CLUBIONIDAE

Castianeira sp. (immature)
Chiracanthium inclusum (Hentz)
Clubiona abboti Koch
Clubiona kastoni Gertsch
Clubiona obesa Hentz
Clubionoides pallens (Hentz)

THOMISIDAE

Misuminae

Misumenoides formosipes (Walckenaer)
Misumenops asperatus (Hentz)
Misumenops oblongus (Keyserling)
Xysticus elegans Keyserling
Xysticus ferox (Hentz)
Xysticus fraternus Banks
Xysticus funestus (Keyserling)
Xysticus triguttatus Keyserling

Philodrominae

Philodromus placidus Banks
Philodromus rufus Walckenaer
Thanatus sp. (immature)

Tibellus maritimus (Menge)
Tibellus oblongus (Walckenaer)

SALTICIDAE

Evarcha hoyi (Peckham)
Habrocestum pulex (Hentz)
Habronattus decorus (Balckwall)
Hasarius adansoni (Audouin)
Icius harti Emerton
Maevia inclemens (Walckenaer)
Marpissa lineata (Koch)
Marpissa undata (DeGeer)
Metaphidippus galathea (Walckenaer)
Neon nelli Peckham

Paraphidippus marginata (Walckenaer)
Peckhamia scorpiona (Hentz)
Phidippus clarus Keyserling
Phidippus princeps (Peckham)
Phlegra fasciata (Hahn)
Salticus scenicus (Linnaeus)
Sittacus floridanus Gertsch and Mulaik
Synemosyna formica Hentz
Zygoballus bettini Peckham

ORDER OPILIONIDA

Leiobunum nigropalpi Wood
Leiobunum ventricosum Wood
Leiobunum verrucosum Wood

Literature Cited

Included is a brief list of works for studying Pennsylvania spiders. Many of these contain bibliographies of more specialized papers. Kaston is probably the most useful single work for identifying species.

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